

SECTION 01040

COORDINATION, FIELD ENGINEERING, AND MEETINGS

1 GENERAL

1.1 UTILITY OUTAGE COORDINATION

1.1.1 Approval

The Contractor shall obtain written permission/approval from the Contracting Officer 21 days prior to:

- (1) Performing any work which will close any runway or street or interrupt any utility service.
- (2) Making any excavation: Any damage to underground utilities, communication lines, etc, will be the responsibility of the Contractor if the approval is not obtained.
- (3) Utility outages: The proposed outage request shall indicate the proposed work and length of outage.

1.1.2 Government Right to Delay

The Government reserves the right to postpone for 7 days, any scheduled outages. There shall be no outages when the outside temperature is expected to be below 35 degrees F 2 degrees C.

1.1.3 Government Performance

Government personnel shall perform all shutting off and turning on of valves and switches necessary to accomplish scheduled outage.

USE THE FOLLOWING PARAGRAPH ON ALL PROJECTS WHERE THERE IS UNIT PRICING AND QUANTITIES ARE BASED ON SURVEYS. USE ALTERNATE 1 EXCEPT FOR LARGE DAMS OR DESIGNATED CRITICAL STRUCTURES.

ALTERNATE 1

1.2 QUANTITY SURVEYS (APR 1984) (FAR 52.236-16)

1.2.1 General

Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

1.2.2 Conducting Surveys and Computations

The Contractor shall conduct the original and final surveys and surveys for any periods for which progress payments are requested. All these surveys shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance. The Government shall make such computations as are necessary to determine the quantities of work performed or finally in place. The Contractor shall make the computations based on the surveys for any periods for which progress payments are requested.

1.2.3 Submittals

Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

ALTERNATE 2

1.3 QUANTITY SURVEYS (APR 1984) (FAR 52.236-16)

1.3.1 General

Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

1.3.2 Conducting Surveys and Computations

The Government shall conduct the original and final surveys and make the computations based on them. The Contractor shall conduct the surveys for any periods for which progress payments are requested and shall make the computations based on these surveys. All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement for a specific instance.

1.3.3 Submittal

Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

1.4 LAYOUT OF WORK (APR 1984) (FAR 52.236-17)

The Contractor shall lay out his work from Government-established base lines and bench marks indicated on the drawings and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at his own expense, all stakes, templates, platforms, equipment, tools, and materials and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may

be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through his negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

1.5 OTHER CONTRACTORS

(Reference CONTRACT CLAUSE entitled "Other Contracts.") Other Contractors will be working in the project area during construction under this contract. The Contractor shall arrange and perform his work and store his materials in cooperation with other Contractors and as directed by the Contracting Officer. Other Contractors working during this same period of construction are listed as follows:

Contractor Description of Work Contract No.

1.5 MONUMENT REPLACEMENT

1.5.1 General

Government-established horizontal and vertical control monuments that are shown on the drawings, if destroyed shall be reestablished by the Contractor in locations as directed by the Contracting Officer. Control points set by the Contractor for the purpose of reestablishing the monuments and to properly control the work, if destroyed and not reset by the Contractor, shall be reestablished by the Government at the Contractor's expense. Survey shall be performed by a Registered Land Surveyor.

1.5.2 Horizontal Control

Horizontal control shall be based on the State Plane Coordinate System as developed by the National Geodetic Survey. Horizontal control shall originate and close on control points established by the Government.

1.5.3 Vertical Control

Elevations shall originate and close on vertical controls established by the Government. Third Order Accuracy or better shall be maintained for all vertical survey control. Vertical error shall be adjusted for all control markers established throughout each level loop. A transcript of all adjusted vertical marks set and adjusted horizontal marks set, shall be furnished on forms furnished by the Government. (SWD Form 598)

1.5.4 Survey Procedure

Standard ground survey methods necessary to obtain Third Order Accuracy standards shall be used. The standard 4-3/4- by 7-1/2-inch 120 mm by 190 mm hardback fieldbook shall be used. The party setup, weather conditions, and date shall be entered at the top of the page for each workday. The original notebook shall be turned in at the completion of the work and shall become the property of the Government.

1.5.5 Monuments

Concrete monuments shall be set as control monuments, where required. The monuments shall consist of 6-inch 150 mm-diameter concrete posts of standard mix and a Government-furnished bronze disk flush with top, set at least 2.6

feet 780 mm into solid ground and 0.4 foot 120 mm above the ground surface. A No. 4 18-inch reinforcing bar shall be cast in the top portion of the monument. Each monument shall be identified by stamping the bronze disk with steel dies, indicating thereon the name of the site and number of the monument. A Government-furnished galvanized U-channel rail steel delineator post, 6.5 feet 1950 mm in length with a USCE sign attached shall be set in concrete within 1 foot of each control monument. Markers which fall in roads or improved areas shall be either buried or a disk set flush in pavement, whichever may be appropriate to the situation. Control monuments shall be referenced by chain distance and angle to at least three objects, such as blazed trees, crosses in solid rock, or other physical features in the immediate vicinity.

USE THE FOLLOWING PARAGRAPH IN CONTRACTS CONSIDERED TO BE SUFFICIENTLY COMPLEX TO WARRANT ITS USE SUCH AS HEAVY CONSTRUCTION INVOLVING EARTHWORK, PAVING, AND MULTISTORY BUILDING PROJECTS. CHECK WITH SAFETY AND/OR CONSTRUCTION IF IN DOUBT.

1.6 ACCIDENT PREVENTION PREPLANNING (SWTCD)

In addition to the requirements of the CONTRACT CLAUSE entitled "Accident Prevention," the Contractor shall:

- a. Meet with the Contracting Officer and/or his representative before each major phase of construction. The purpose of the meeting will be to identify the specific hazards that are associated with that phase of construction. The meeting will include the general Contractor's superintendent, Quality Control Inspector, and superintendent or foreman in charge of the operation whether performed by the general Contractor or subcontractor.
- b. Identify at this meeting what construction methods and equipment will be used to protect the workmen against the hazards that are anticipated during that phase of construction. This plan, when agreed upon by the Contracting Officer and Contractor, will become a part of the Contractor's safety program.
- c. Be responsible for insuring that all subcontractors are knowledgeable and follow the safety plan agreed upon by the Contractor and Contracting Officer.

USE THIS PARAGRAPH ONLY FOR HIGH HAZARD PROJECTS
REQUIRING FULL TIME SAFEY PERSONNEL DUE TO SIZE OR
COMPLEXITY AS DETERMINED BY AND WITH CONCURRENCE FROM
SAFETY AND OCCUPATIONAL HEALTH OFFICE."

1.7 ACCIDENT PREVENTION MANAGEMENT (JAN 1985 OCE)

- a. Full-time, on-site, safety coverage shall provided by the Contractor.
- b. The following conditions shall be met:
 - (1) The Contractor shall employ at the project site to cover all hours of work at least one Safety and Occupational Health person to manage the Contractor's accident program. Duties which are not

germane to the safety program shall not be assigned to the Safety and Health person(s). The principal safety person shall report to and work directly for the Contractor's on-site top manager, higher level official, or corporate safety office. The Safety and Health person(s) shall have the authority to take immediate steps to correct unsafe or unhealthful conditions. The presence of a Safety and Health person will not abrogate safety responsibilities of other personnel.

- (2) Qualifications for Safety and Health person(s).
- (a) Shall have a degree in engineering or safety in at least a four year program from an accredited school; or
- (b) Shall have legal registration as a Professional Engineer or a Certified Safety Professional and, in addition, shall have been engaged in safety and occupational health for at least one year of experience, no time being credited to this one year unless at least fifty percent of the time was devoted to safety and occupational health; or
- (c) Shall have a degree other than that specified in (a) above and, in addition, shall have been engaged in safety and occupational health for at least three years, no time being credited to these three years unless at least fifty percent of the time each year was devoted to safety and occupational health; or
- (d) In lieu of a degree, shall have been engaged in safety and occupational health for at least five years, no time being credited to these five (5) years unless at least fifty percent of the time each year was devoted to safety and occupational health;
- (e) First aid work is not a creditable experience.
- (3) The name and qualifications of the nominated safety person(s) shall be furnished to the Contracting Officer for acceptability and a functional description of duties shall be provided prior to the pre-work conference.
- 2 PRODUCTS (NOT APPLICABLE)
- 3 EXECUTION (NOT APPLICABLE)

--End of Section--